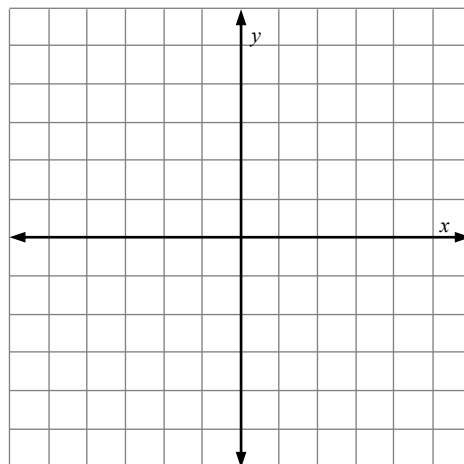


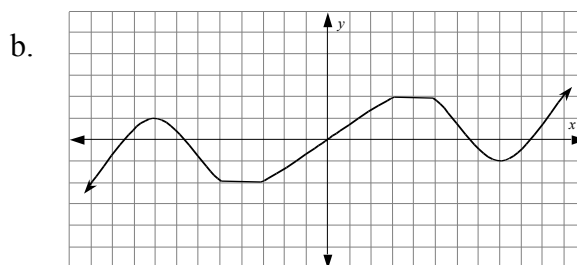
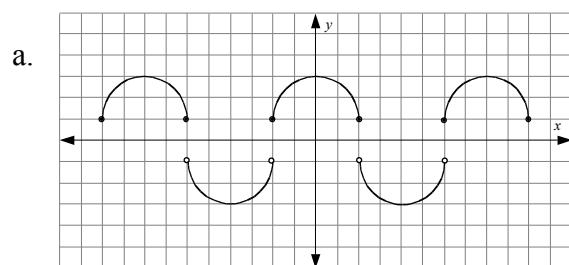
- Sketch freehand, a graph of a function  $f(x)$  that satisfies all of the following conditions. Label all relevant features of the graph.

Increasing on  $[3,6]$ .  
Decreasing on  $[0,3]$ .  
 $f(4)=f(2)=0$   
 $f(0)=3$   
 $f(-x)=f(x)$



- Circle the words that correctly describe each graph.

- |    |          |     |      |                       |
|----|----------|-----|------|-----------------------|
| a. | function | odd | even | inverse is a function |
| b. | function | odd | even | inverse is a function |



- State the intervals on which graph (a) above is increasing, decreasing, concave up, and concave down.

- Given  $\log x = 5$ ,  $\log y = 3$ ,  $\log z = 2$ , evaluate  $\log \left( \frac{xy^4}{\sqrt{z}} \right)$

